

Amendments to the Specification other than the Claims:

Please add the following heading after the first paragraph on page 1:

Background of the Invention

Please replace the third paragraph on page 1 with the following:

If a charged particle or photon strikes the detector, it produces ~~pairs of electron holes~~ electron - hole pairs in the region of the crystalline germanium. The relevant charge migrates to the corresponding contact, where it is read out. The position-dependent charge measured presents a measure for the required information.

Please replace the last paragraph beginning on page 2 with the following:

To obtain a position-sensitive detector, the n and/or p layers are provided with structures. The structures can be produced using a lithographic method. Such lithographic methods are already known within the general specialist knowledge. With one photo-photolithographic method, a photo-sensitive ~~paint~~ coating is applied to the surface, which is to be structured. The photo-sensitive ~~paint~~ coating is partially exposed through a ~~shadow~~ mask. Using plasma etching, grooves are then introduced into the surface in the exposed parts of the photo-sensitive ~~paint~~ coating. The n layer and/or p layer is then structured. This should be understood to mean that the layer acting as the n contact or p contact is subdivided into individual segments, which are separated from one another by grooves. These separated elements are frequently referred to in the literature as position elements. Finally, the ~~paint~~ coating layer may be removed, for example, by chemical etching.

Please add the following heading before the first full paragraph on page 5:

Summary of the Invention

Please add the following heading and paragraphs after the first full paragraph on page 5:

Brief Description of the Drawings

Figure 1 shows a cross section of a detector according to a first preferred embodiment.

Figure 2 shows a cross section of a detector according to a second preferred embodiment.

Please add the following heading before the third full paragraph from the bottom of page 5.

Detailed Description of the Preferred Embodiments